

RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/826,966B
Source: 1FW/16
Date Processed by STIC: 3/27/07

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 03/27/2007

PATENT APPLICATION: US/10/826,966B

TIME: 15:00:13

Input Set : N:\efs\03_27_07\10826966B_efs\03-465-D_Sequence.TXT

Output Set: N:\CRF4\03272007\J826966B.raw

3 <110> APPLICANT: Sirna Therapeutics, Inc.
4 McSwiggen, James
5 Macejak, Dennis
6 Morrissey, David
8 <120> TITLE OF INVENTION: RNA Interference Mediated Inhibition of Gene Expression

Using

9 Chemically Modified Short Interfering Nucleic Acid (siNA)
11 <130> FILE REFERENCE: 400/151 (03-465-D)
13 <140> CURRENT APPLICATION NUMBER: US 10/826,966B
14 <141> CURRENT FILING DATE: 2004-04-16
16 <150> PRIOR APPLICATION NUMBER: US 10/757,803
17 <151> PRIOR FILING DATE: 2004-01-14
19 <150> PRIOR APPLICATION NUMBER: US 10/720,448
20 <151> PRIOR FILING DATE: 2003-11-24
22 <150> PRIOR APPLICATION NUMBER: US 10/693,059
23 <151> PRIOR FILING DATE: 2003-10-23
25 <150> PRIOR APPLICATION NUMBER: US 10/444,853
26 <151> PRIOR FILING DATE: 2003-05-23
28 <150> PRIOR APPLICATION NUMBER: US 10/652,791
29 <151> PRIOR FILING DATE: 2003-08-29
31 <150> PRIOR APPLICATION NUMBER: US 10/422,704
32 <151> PRIOR FILING DATE: 2003-04-24
34 <150> PRIOR APPLICATION NUMBER: US 10/417,012
35 <151> PRIOR FILING DATE: 2003-04-16
37 <150> PRIOR APPLICATION NUMBER: US 10/427,160
38 <151> PRIOR FILING DATE: 2003-04-30
40 <150> PRIOR APPLICATION NUMBER: PCT/US03/05346
41 <151> PRIOR FILING DATE: 2003-02-20
43 <150> PRIOR APPLICATION NUMBER: PCT/US03/05028
44 <151> PRIOR FILING DATE: 2003-02-20
46 <150> PRIOR APPLICATION NUMBER: US 60/358,580
47 <151> PRIOR FILING DATE: 2002-02-20
49 <150> PRIOR APPLICATION NUMBER: US 60/363,124
50 <151> PRIOR FILING DATE: 2002-03-11
52 <150> PRIOR APPLICATION NUMBER: US 60/386,782
53 <151> PRIOR FILING DATE: 2002-06-06
55 <150> PRIOR APPLICATION NUMBER: US 60/406,784
56 <151> PRIOR FILING DATE: 2002-08-29
58 <150> PRIOR APPLICATION NUMBER: US 60/408,378
59 <151> PRIOR FILING DATE: 2002-09-05
61 <150> PRIOR APPLICATION NUMBER: US 60/409,293
62 <151> PRIOR FILING DATE: 2002-09-09
64 <150> PRIOR APPLICATION NUMBER: US 60/440,129
65 <151> PRIOR FILING DATE: 2003-01-15

see p. 6 and p. 7

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67 <150> PRIOR APPLICATION NUMBER: PCT/US02/15876
68 <151> PRIOR FILING DATE: 2002-05-17
70 <160> NUMBER OF SEQ ID NOS: 674
72 <170> SOFTWARE: PatentIn version 3.3
74 <210> SEQ ID NO: 1
75 <211> LENGTH: 21
76 <212> TYPE: RNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
83 <220> FEATURE:
84 <221> NAME/KEY: misc_feature
85 <222> LOCATION: (1)..(1)
86 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
88 <220> FEATURE:
89 <221> NAME/KEY: misc_feature
90 <222> LOCATION: (21)..(21)
91 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
93 <400> SEQUENCE: 1
94 uaaccucgua cuggugccuc c 21
97 <210> SEQ ID NO: 2
98 <211> LENGTH: 21
99 <212> TYPE: RNA
100 <213> ORGANISM: Artificial Sequence
102 <220> FEATURE:
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109 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
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114 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
116 <400> SEQUENCE: 2
117 ggaggcacca guacgagguu a 21
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123 <213> ORGANISM: Artificial Sequence
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130 <221> NAME/KEY: misc_feature
131 <222> LOCATION: (1)..(1)
132 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
134 <220> FEATURE:
135 <221> NAME/KEY: misc_feature
136 <222> LOCATION: (21)..(21)

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149 <223> OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
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154 <222> LOCATION: (1)..(1)
155 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
157 <220> FEATURE:
158 <221> NAME/KEY: misc_feature
159 <222> LOCATION: (21)..(21)
160 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
162 <400> SEQUENCE: 4
163 ugauugggga ucuuggagu u 21
166 <210> SEQ ID NO: 5
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169 <213> ORGANISM: Artificial Sequence
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178 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
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182 <222> LOCATION: (21)..(21)
183 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
185 <400> SEQUENCE: 5
186 guaggagucu guaggacuug g 21
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201 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
203 <220> FEATURE:
204 <221> NAME/KEY: misc_feature
205 <222> LOCATION: (21)..(21)
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Input Set : N:\efs\03_27_07\10826966B_efs\03-465-D_Sequence.TXT

Output Set: N:\CRF4\03272007\J826966B.raw

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223 <222> LOCATION: (1)..(1)
224 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
226 <220> FEATURE:
227 <221> NAME/KEY: misc_feature
228 <222> LOCATION: (21)..(21)
229 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
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232 gcaaaaaaccc ugugauuuucc u 21
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237 <212> TYPE: RNA
238 <213> ORGANISM: Artificial Sequence
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247 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
249 <220> FEATURE:
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251 <222> LOCATION: (21)..(21)
252 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
254 <400> SEQUENCE: 8
255 aggaaaucac aggguuuuug c 21
258 <210> SEQ ID NO: 9
259 <211> LENGTH: 21
260 <212> TYPE: RNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
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269 <222> LOCATION: (1)..(1)
270 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
272 <220> FEATURE:
273 <221> NAME/KEY: misc_feature
274 <222> LOCATION: (21)..(21)
275 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
277 <400> SEQUENCE: 9

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RAW SEQUENCE LISTING

DATE: 03/27/2007

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Input Set : N:\efs\03_27_07\10826966B_efs\03-465-D_Sequence.TXT

Output Set: N:\CRF4\03272007\J826966B.raw

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283 <212> TYPE: RNA
284 <213> ORGANISM: Artificial Sequence
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291 <221> NAME/KEY: misc_feature
292 <222> LOCATION: (1)..(1)
293 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
295 <220> FEATURE:
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297 <222> LOCATION: (21)..(21)
298 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
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320 <222> LOCATION: (21)..(21)
321 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
323 <400> SEQUENCE: 11
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327 <210> SEQ ID NO: 12
328 <211> LENGTH: 21
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330 <213> ORGANISM: Artificial Sequence
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338 <222> LOCATION: (1)..(1)
339 <223> OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
341 <220> FEATURE:
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343 <222> LOCATION: (21)..(21)
344 <223> OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
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347 gguugaucc aagaaaggac c 21

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/826,966B

DATE: 03/27/2007
TIME: 15:00:14

FyI

Input Set : N:\efs\03_27_07\10826966B_efs\03-465-D_Sequence.TXT
Output Set: N:\CRF4\03272007\J826966B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:67; N Pos. 20,21
Seq#:68; N Pos. 20,21
Seq#:69; N Pos. 20,21
Seq#:70; N Pos. 20,21
Seq#:71; N Pos. 20,21
Seq#:72; N Pos. 20,21
Seq#:73; N Pos. 20,21
Seq#:74; N Pos. 20,21
Seq#:75; N Pos. 20,21
Seq#:76; N Pos. 20,21
Seq#:77; N Pos. 20,21
Seq#:78; N Pos. 20,21
Seq#:79; N Pos. 20,21
Seq#:80; N Pos. 20,21
Seq#:82; N Pos. 14,15
Seq#:84; N Pos. 12,13
Seq#:85; N Pos. 20,21
Seq#:86; N Pos. 20,21
Seq#:87; N Pos. 20,21
Seq#:88; N Pos. 20,21
Seq#:89; N Pos. 20,21
Seq#:90; N Pos. 20,21
Seq#:91; N Pos. 20,21
Seq#:92; N Pos. 20,21
Seq#:93; N Pos. 20,21
Seq#:94; N Pos. 20,21
Seq#:95; N Pos. 20,21
Seq#:96; N Pos. 20,21
Seq#:97; N Pos. 20,21
Seq#:98; N Pos. 20,21
Seq#:99; N Pos. 20,21
Seq#:100; N Pos. 20,21
Seq#:101; N Pos. 20,21
Seq#:102; N Pos. 20,21
Seq#:103; N Pos. 20,21
Seq#:104; N Pos. 20,21
Seq#:105; N Pos. 20,21
Seq#:106; N Pos. 20,21
Seq#:107; N Pos. 20,21
Seq#:108; N Pos. 20,21
Seq#:109; N Pos. 20,21
Seq#:110; N Pos. 20,21
Seq#:111; N Pos. 20,21
Seq#:112; N Pos. 20,21

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/826,966B

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Input Set : N:\efs\03_27_07\10826966B_efs\03-465-D_Sequence.TXT
Output Set: N:\CRF4\03272007\J826966B.raw

Seq#:113; N Pos. 20,21
Seq#:114; N Pos. 20,21
Seq#:115; N Pos. 20,21
Seq#:116; N Pos. 20,21
Seq#:117; N Pos. 20,21
Seq#:118; N Pos. 20,21
Seq#:119; N Pos. 20,21

VERIFICATION SUMMARY

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Input Set : N:\efs\03_27_07\10826966B_efs\03-465-D_Sequence.TXT

Output Set: N:\CRF4\03272007\J826966B.raw

L:1392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:0
L:1415 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:0
L:1438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:0
L:1461 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0
L:1489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0
L:1542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0
L:1570 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0
L:1598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0
L:1626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0
L:1654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0
L:1707 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:0
L:1740 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0
L:1768 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:0
L:1796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:0
L:1831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0
L:1866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:0
L:1924 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:0
L:1952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:0
L:2010 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:0
L:2033 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:0
L:2056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0
L:2079 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90 after pos.:0
L:2102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:0
L:2125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:0
L:2148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:0
L:2171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0
L:2194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:0
L:2217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:0
L:2240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:97 after pos.:0
L:2263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:0
L:2286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0
L:2334 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:0
L:2362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0
L:2415 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:0
L:2443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:0
L:2471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104 after pos.:0
L:2499 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:105 after pos.:0
L:2527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:0
L:2550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0
L:2573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108 after pos.:0
L:2596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:0
L:2619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:0
L:2642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:0
L:2665 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112 after pos.:0
L:2688 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:113 after pos.:0
L:2711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114 after pos.:0
L:2734 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115 after pos.:0
L:2757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:116 after pos.:0

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L:2780 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:117 after pos.:0
L:2803 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:118 after pos.:0
L:16278 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (517) SEQUENCE:
L:16284 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (518) SEQUENCE:
L:16290 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (519) SEQUENCE:
L:16295 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (520) SEQUENCE:
L:16628 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (531) SEQUENCE: